ABSTRACT

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A torque sensor is provided which consists of a magnet, an assembly of magnetic rings, and a magnetic sensor. The magnetic rings have claws arrayed thereround at regular intervals. Each of the claws of one of the rings is interposed between adjacent two of the claws of the other ring. Upon input of torque, the magnet is rotated relative to the ring assembly, thereby causing the density of magnetic flux to change as a function of the torque which is sensed by the magnetic sensor. Each of the claws is geometrically shaped so as to increase the density of magnetic flux flowing through the ring assembly, thereby improving the sensitivity of the sensor.